

## QUICK REFERENCE: TEACHING HITTING w/ 4 SIMPLE TOOLS

So you want your team to be an offensive juggernaut? Yes? Of course. We all want to get the hit parade rolling. Frankly, the game is waaaaay more fun when you put the ball in play.

The challenge? Your job as a coach is to improve the hitting on your team. I'll say that again. As the coach, your RESPONSIBILITY is to improve the hitting on your team. It won't just happen... and it won't get better with empty affirmations like, "keep your eye on the ball", or "...get your elbow up." Truth is, hitting is a combination of muscle-reaction habits and mental-approach that produces contact with the baseball.

When my son was 11, he fell into a slump. This is normal, right? All baseball players experience a 'slump' sooner or later. However, this was very weird for my son. Since he began playing baseball at the age of five (t-ball at the time), he did not strike out, ever. His hand-eye coordination was at a level that he literally did not strike out at the plate in 5+ years of baseball. Sure he got out... but he did not strike out while swinging at the plate. Prodigy, right?

Not exactly.

At the age of 11, with a .600 batting average early in his season, *IT* happened. He struck out! After fouling off two fastballs, and seeing a junk pitch in the dirt on 0-2... he swung right 'through' the ball on a 1-2 count. We knew off-speed was coming... he got the changeup as he expected, and he whiffed. Completely whiffed! *Crazy* was my first thought.

I. COULD. NOT. BELIEVE. IT.

Truth be told... his strikeouts soon became a recurring problem that had me completely befuddled. Over the next three tournaments, he struck out in half of his at bats... 14 of 28 at bats to be exact. Even more telling, in the at bats that he actually *made* contact, he grounded out to the left side of the infield. Weak ground balls pounded into the ground... all of which ended up in outs more than 90% of the time.

All of this occurred before I actually *learned* about the baseball swing. I had no resource... or knowledge, to solve the issue.

I couldn't help him beyond simple affirmations that resulted in little confidence such as "...**just relax**", "...**watch the ball**", and "...**you've got this**".

It didn't work.

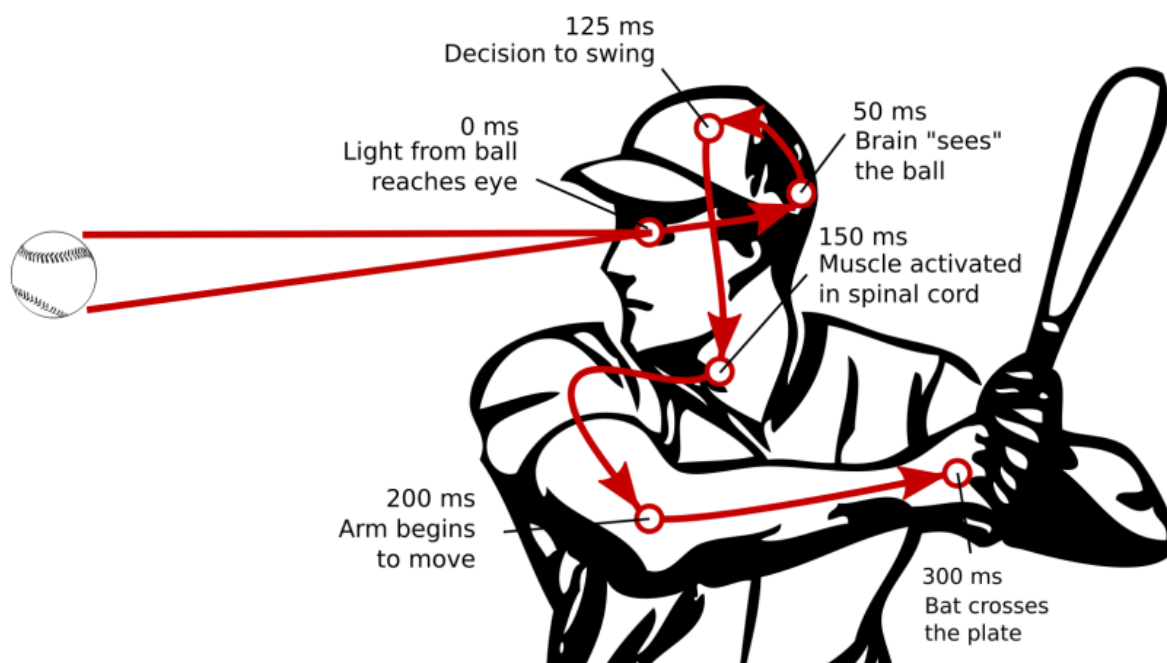
The neuro-muscular habits were becoming ingrained. He was missing those details that made the difference. And he was FRUSTRATED!

This manual provides a detailed solution. Literally, we fixed my son's 'swing' (aka the neuro-muscular habits that produced the bat path to the ball) in a matter of ten minutes. To be clear... We learned what the fix *was*, and began the process of building new neuro-muscular habits that resulted in a complete fix. The purpose of this quick-manual is to help you do the same thing.

Why is hitting so difficult in the first place?

Simple, the *complex kinetic chain* (aka the body parts required to swing) cannot be *manipulated* in the time that it takes to hit a baseball. This simply means that all of the advice dads are shouting from behind the fence (elbows up... see the ball... step toward the pitcher) do nothing in the *TIME* available to see the ball, react, and make a proper swing.

At ScienceNonFiction.org, they identified the *time* it takes to hit a baseball (credit their image below), which is approximately 300 milliseconds of reaction time or .3 seconds.  $\frac{1}{3}$  of a second is not enough time to manipulate the swing mechanics (i.e. elbow up, throw the knob, squash the bug, etc.) to hit the ball. **The proper mechanics must be habitually trained so that they are reactionary weapons.**



*It takes at least 300 ms for a baseball hitter to see the ball and react to swing the bat. During this time, the brain has to process the image, decide to swing, and then contract the muscles to actually move the bat across the plate.*

If we can agree that .3 is fast... actually *really fast*, how do we *build* the proper habits that become *reactions*, so that we can spend that .3 seconds on deciding to swing or not, and not *HOW* to swing? It's actually incredibly simple. With three tools, some patience, time, and attention, you can *improve everyone's* ability to hit. Let's get started.

To use the metaphor, let's use a "recipe" to set the framework. If we were going to, say, bake a cake, we'd have a list of ingredients, and then instructions to tell us what to do. Again, with the metaphor in mind, our *ingredients* will be *Tools*, and the *instructions* will be *Process*.

Home Run Recipe:

Ingredients (Tools):

- 1) Wiffle Balls
- 2) Hitting Paddle
- 3) Baseball Tee
- 4) Video Analysis from Phone

That's it!

First, let's talk about those tools.

- 1) Wiffle Balls. These are easy to procure, however not ALL wiffle balls are the same. You can go to the local Walmart, and find very cheap wiffle balls. However, I would not recommend that.

First, they are too light. This will affect your ability to see accurate ball flight. Also, if you plan to use the same wiffle balls outdoors, you will find that the wind will affect the ball too much if it's too light, making pitches very difficult to deliver.

Second, they are not durable. If you buy quality wiffle balls, you will get multiple seasons out of them. The cheaper versions crack and/or split open.

I get two sizes. I use the [9" Pitching Wiffle Balls](#) and the [5" Mini Wiffle Golf Balls](#). I use the Pitching Wiffle Balls on the tee, and the Mini Golf Wiffle Balls with the Hitting Paddles (although the regular size wiffle balls work fine on the paddle too).

- 2) We need a Hitting Paddle. I found them for sale online ([HERE](#)), but I've resorted to making them myself due to cost. I can make one for approximately \$10.00 in material, plus my time. It is a critical element in teaching consistent square contact, which comes from the upper body mechanics. You can find instructions on how to build the Hitting Paddle as a Bonus on our CoachTube course!
- 3) You also need a Hitting Tee. Tony Gwynn called this his Secret Weapon. According to Tony Gwynn, "The combination of the batting tee and the wiffle ball is the best thing ever invented to learn about hitting." The tee and the wiffle ball will let you know if you're doing things correctly." Like all things, you get what you pay for. If you buy a \$16.00 tee at Wal-Mart, it's likely that the rubber top will split soon, rendering the tee useless. If you plan on using the tee for some time, spend a little extra to ensure longevity.

- 4) Lastly, you need a camera/record application on your phone so that you can provide video feedback to the hitter. Simply, the student will make faster progress learning what to do and what not to do if he/she can *SEE* what he's doing in third person (aka through film). As they say, a picture is worth a thousand words. If a picture is worth 1000 words... then film is 10x that... it's worth 10,000 words!

Biomechanically, the body can 'fix itself through time. The body knows what to do when it can relate to what is going on. This is known as the Bernstein Principle: "The body will organize itself based upon the ultimate goal of the activity." It is derived from the works of the father of biomechanics, Nikolai Bernstein, a Soviet Neurophysiologist. We simply speed up the process through film, giving the body (the brain) anchor points to work from... and allowing growth (aka correction) to happen.

With a simple camera application, they can see themselves swing the bat in slow motion. Verbal and visual feedback occurs. Corrections can be made. The players learn to analyze themselves. This is where the magic occurs.

I used to use Coach's Eye, but they have since discontinued the product. I use the free version of the golf application called "V1". It records at a frame rate of 240 frames per second, which captures the motion in fine detail. I can quickly analyze the film immediately, after each swing (if I want to), and give instruction. There are other tools out there... just make sure that their frame rates are good enough so that the film does not show up blurry!

These four tools, when *combined with* your newfound knowledge of hitting mechanics, will revolutionize the way your player(s) train, and will significantly aid them in crushing the ball. It did for my son... and hundreds of other players that came through my hitting facility.

## PROCESS

Obviously, you have to know what you are looking for; just having the tools will not create magic. Using the lessons outlined in the 7 Secrets of Hitting, we are ready to go to work.

Where do we start? It's important to have a framework to work from before we just start swinging away. According to James Clear (author of [Atomic Habits](#)), building successful habits starts with small steps:

*"Increase your habit in very small ways. Rather than trying to do something amazing from the beginning, start small and gradually improve. Along the way, your willpower and motivation will increase, which will make it easier to stick to your habit for good."*

Given, first start with identifying what needs to be fixed. Once you have identified what needs to be fixed, lay out a plan to work on the incremental steps to arrive at the end-solution.

Although I've seen great success with kids pounding away with a Hitting Paddle, I actually think there is a better way to train. Obviously, the players are NOT going to be using a hitting paddle in a real game. We want the skills gained from the Hitting Paddle to translate to a regular bat, on a regular pitch, and crush the baseball/softball.

Given, the 'best' program that I have used to QUICKLY transfer skills is a 3 part series of stair steps to mastering the at bat and building muscle memory.

First and FOREMOST, this only works if you are using INTENTIONAL practice. Geoff Colvin, in his outstanding book Talent is Overrated, debunks both talent and experience as the determining factors in world class performance, and instead makes a case for deliberate practice, intrinsic motivation and starting early.

So what is **deliberate practice**? Geoff Colvin shares:

*“Deliberate practice is characterized by several elements, each worth examining. It is activity designed specifically to improve performance, often with a teacher’s help; it can be repeated a lot; feedback on results is continuously available; it’s highly demanding mentally, whether the activity is purely intellectual, such as chess or business-related activities, or heavily physical, such as sports; and it isn’t much fun.”*

When coaching kids, it’s hard to get anyone to do much, when it isn’t much fun. We’ll get into how we make it fun here in a bit. But before that, how do we teach hitting in a deliberate way?

To get started, we must quote Archilocus, a Greek philosopher:

“We don't rise to the level of our expectations, we fall to the level of our training.” — Archilochus

We design our training so that it is consistent, deliberate, and aimed at building habits that require no mental processing.

In short, we use bridging to build the habits.

Often, I won't even start with a wiffle ball, having the students only swing through the top of the tee with the paddle. I film this to get an idea of what their swing looks like.

First we start with a tee and the paddle. First, you will hit three wiffle balls with the Hitting Paddle, going 75%, with a heavy focus on the mechanical side of hitting. Flat Paddle. Show me the Elbow. Bat Slant. They only get to 'graduate' from the Hitting Paddle if they drive three balls 3-8.

Then bridge to the baseball bat. Immediately after achieving the three hits using the Hitting Paddle, put down the Hitting Paddle, and pick up the bat and go to the tee. The student then aims at hitting 3 wiffle balls, off of the tee, using the exact same biomechanics, feel, and

approach used in the Hitting Paddle. If they cannot drive three balls immediately, they go back to the Hitting Paddle, and start over.

If they indeed got three straight hits off the tee, we graduate to soft toss, with a wiffle ball, using the Hitting Paddle. Then with a bat. Our goal is to only hit line drives. If we can get the line drives, we graduate. Once they miss... we go all the way back.

***Kids will want to stay in the cage and just swing away at baseballs.... but this is a mistake.*** Remember, our goal is to develop the proper muscle memory. Nothing gives you feedback better than the Hitting Paddle.

I often create an incentive when the players have gone through the cycle enough times (to change up the process). I tell them that if they can get the 3 hits with the paddle, I will allow them to then transition to a bat, a ball, and swing at hitting off the tee three times. If they miss, we go back to the start. We will Take 20-30 swings a day. I will do this process everyday, for at least three weeks.

Then I will add in the live baseball - but only through "soft-toss" hits. I add soft-toss as the third element in the process, and do the same. If they can manage to achieve consecutive "3-8" hits, they will graduate to the bat and live pitch... but, I'll keep pitching and they can keep hitting as long as each hit is 3-8. If they hit a 3-8 ball, then I give them another one, and repeat as long as they have 3-8 hits. I keep a running 'record', reminding them of their 'streak', and challenging them to beat it next time.

Our goal is that every swing is mechanically sound, *resulting* in a 3-8 hit. If, at any time, the mechanics break down, we back up and start over. We are aimed at forming elite habits.

ADVANCED: As they become more advanced, I then add counts to this routine, forcing them to be smart and selective in their pitches. For example, if we get to the bat with a live pitch portion, I'll call the number of outs... you have a runner on 1st, 1 out, and you have a 1-0 count.

It is important to note... that as I introduce other elements of the game (mental elements, such as pitch counts). This is my way of analyzing if the habits (hitting mechanics) are indeed habitual, forcing them to think about other elements in the game - just as they would do in competition.

SUPER ADVANCED: They should inherently know we are avoiding the double play, so we aren't swinging at junk pitches when they are AHEAD in the count. If they swing at a low and away pitch on a 1-0 count (even if its on the black), I call 'em out.. and make them start over. That type of approach will get you beat long term. However, if they attack that same pitch, on 1-2 counts, I will reward them, regardless of outcome. We want a fearless hitter in the box when it's 1-2 count.

## HOW DO YOU TRAIN AN ENTIRE TEAM AT ONCE?

We use a game called “Rockies”. Now this does not happen on day one. This is well after each player has been working on their swing mechanics for 4-6 weeks.

What is this game you call “Rockies”?

Rockies is a simple game we play that develops the hitting habits, but ALSO improves the hitter's mental approach to his at bat. The game is simple, but it REALLY gets the boys' amped up and excited about the 'process'.

The game is simple. You (coach) will always pitch. The player will always hit. You will be playing versus the kid(s). We called it Rockies, since it was our local home team (kids played as the rockies) against <you pick the team>.. I usually chose an inter-division rival, like the Giants or Dodgers.

When the boys are up to bat, they are trying to score runs. As a coach, you run through counts, while also keeping track of the count, outs, and ghost runners (since the kids don't run bases). They are trying to score runs by pounding the ball with 3-8 hits (see Video #??? for explanation on 3-8, or Playbook page #).

After the boys get three outs, they now are going to play as if they are in the field. They are still practicing their hitting, but their hits are now reversed. The only way to earn outs when you are in the field is to hit 3-8 hits. If you hit anything outside of 3-8, that becomes a run for the defense. Three straight 3-8 hits, and you earned three straight outs. Once you have earned three outs, then you go 'back on offense', where you are trying to move runners, drive the ball to certain areas of the field, etc... - good offensive baseball.

I juice up the game by talking trash, commentating the game as if I was Joe Buck in the bottom of the ninth, calling the kids up to bat, asking for their approach, yelling out the score, cheering for them, or against them, throwing trash pitches, hitting them with pitches (wiffle balls of course). It's fast paced, and it is a kid favorite.